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UT-055-3809

INFO. ACTION

Warm Springs A.M.

Warm Springs A.M.

(For BLM use) Serial No.

Date Received

NOTICE

OR

House Range A.M.

House Range A.M.

PLAN OF OPERATIONS

(For Operations Proposed Under the 43 CFR 3809 Regulations)

Instructions to Claimant/Operator: Circle "Notice" (above) if proposed mining activity within the project area will disturb a total of five (5) acres or less during the calendar year. Circle "Plan of Operations" if disturbance will exceed five (5) acres during the calendar year or if operations are within one of the specially designated areas described in 43 CFR 3809.1-4(b). Complete the form in as much detail as possible. Additional sheets may be used if necessary. Use maps or sketches where appropriate (maps or sketches are required for submitted plans of operations and are recommended, but not required for submitted notices). A review of the 43 CFR 3809 regulations should be conducted prior to completion of this form and submission to the appropriate BLM office.

Operator Information:NameAddressTelephone

Rancho Equipment Service

279 East Main
P.O. Box 576
Delta, UT 84624

801 864-3971

Claimant Information (If different than operator):NameAddressTelephone

J. L. Shields

318 South 300 West
Delta, UT 84624

801 864-4123

Claim Information (Claim names, circle claim types (Lode, Placer, Mill Site, Tunnel), BLM Serial Number):

Topaz Calcium #7 BLM Serial #343280
Topaz Calcium #8 BLM Serial #343281

Location of Proposed Activity (i.e. Township, Range, Section):

#343280 #7 SW 1/4 Sec. 21 TWP 13SR NW SLBM
#343281 #8 S.E. 1/4 Sec. 21 TWP 13SR NW SLBM

T. 13 S., R. 11 W., Sec. 21, SW 1/4
T. 13 S., R. 11 W., Sec. 21, SE 1/4

Describe Pre-Existing Disturbances and Structures or Indicate on Maps or Sketches (Mine and Mill Facilities, Workings, Tailings, Dump Areas, etc. It may be to your advantage to document existing disturbance with photographs):

No person resides on the claims, either temporarily or permanently. There are no buildings on the claims of a permanent nature. There is essentially no vegetation on the claims and no surface water. There are public roads located on the claims, and private roads used in the mining operations. All public roads will remain undisturbed. There are no gates on the roads traversing the claims, and none are planned. There are no bridges or cattle guards. No new roads are proposed or planned.

Access Routes (Existing and Proposed)

Access is directly off of existing County Road, however approximately 2500 ft. of existing road between County Road, (Wiess Highway) and Brush Wellman Road was improved.

Proposed Operations: Describe the entire proposed operation, including all surface disturbing activities (road construction, drilling, trenching, backhoe and bulldozer exploration, mining, waste disposal, etc.). List all mechanized earth moving equipment to be used during the operation and state if any explosives are to be utilized. Describe and furnish a map or sketch, when applicable, showing existing surface disturbances, structures, facilities, etc., and the location and size of areas where surface disturbance are proposed, including existing and/or proposed routes of access. Calculate the total acreage proposed for disturbance (1 AC. = 43,560 sq. ft.).

See Sheet "A" for details. Quarry Site Map (scale 1"=50') included.

Date Operations are Proposed to Commence as Outlined in this Submittal - (Month, Day, Year):

Proposed Completion Date - (Month, Day, Year):

This operation could be active for up to ten years, 2001, and possibly longer.

Proposed Reclamation: Describe the proposed reclamation procedures and other measures to be taken to prevent unnecessary or undue degradation of the lands, including measures to be taken if a period of non-operation is anticipated.

See Sheet "B" for details.

I hereby declare that I, or persons I have authorized to do so, will complete all necessary reclamation of areas disturbed during the course of my operations to the standards described in 43 CFR 3809.1-3(d) and that reasonable measure will be taken to prevent unnecessary or undue degradation of the federal lands during operations.


Signature of Claimant or Operator

Date

Notice to Claimants/Operators:

1. A notice submitted in relation to the 43 CFR 3809 regulations does not require approval from the BLM. However, notification of such activities shall be made at least 15 days before commencing operations. Approval of a submitted plan of operations is required from the BLM prior to commencing operations. The BLM will promptly acknowledge receipt of a plan and will notify the claimant/operator of the status of the plan within 30 days of receipt.
2. Approval of a plan of operations does not constitute certification of ownership to any person named as claimant/operator herein, nor does approval constitute recognition of the validity of any mining claims named herein.
3. Information and data submitted and specifically identified by the operator as containing trade secrets of confidential or privileged commercial or financial information should be attached to a separate page and cited in the text of the notice or plan of operations. This information will be filed separately by the BLM and will not be available for public inspection.
4. Failure of an operator to file a notice under 3809.1 - 3 or a plan of operations under 3809.1 - 4 will be subject to the operator, at the discretion of the authorized office, to being served a notice of non-compliance or enjoined from the continuation of such operations by a court order until such time as a plan or notice is filed with the authorized officer.

Rancho Equipment Service

P.O. Box 576
Delta, Utah 84624

"A"

Our plan of operation is to contract with Western States Drilling and Blasting Company to drill 6 7/8" diameter holes by 25' deep and blast with ANFO (Ammonium Nitrate with fuel oil) an area of approximately 3,000 sq. ft. This process will be done as often as needed for the limestone material.

The material blasted will then be pushed with a D-9 Cat dozer to a pile, then fed with a Cat 966 loader into a Kobel Co. 4230 single jaw crusher, which in turn feeds into a Thunderbird Model 4230 JVDH crushing plant. (See attached Sheets #1A & 1B). We plan to produce 2500 ton of crushed material per each 24 hour period, of which approximately 60% will be finished product, meeting specifications of I.P.S.C. (See attached Sheet #2A) and 40% being fines or waste material.

⇒ 1,500 t PRODUCT 1,000 t FINES/WASTE

Approximately ten trips of 29 tons of finish material will be loaded into a semi-truck pulling double trailers and hauled 30 miles to the I.P.S.C. site, where it is used for the purpose of desulfurization of the two generator units. (See attached Sheets #3A-3B-3C.)

The waste material will be stock piled as shown on map (See attached #4A) and used as backfill in the quarry during recontouring prior to the spreading of top soil for the reclamation of the project.

We plan to mine, crush, and haul 60,000 to 100,000 ton of finished product per year for a four year contract, with an option of an additional four year contract, so our operation could extend to eight years and possibly longer.

484

23

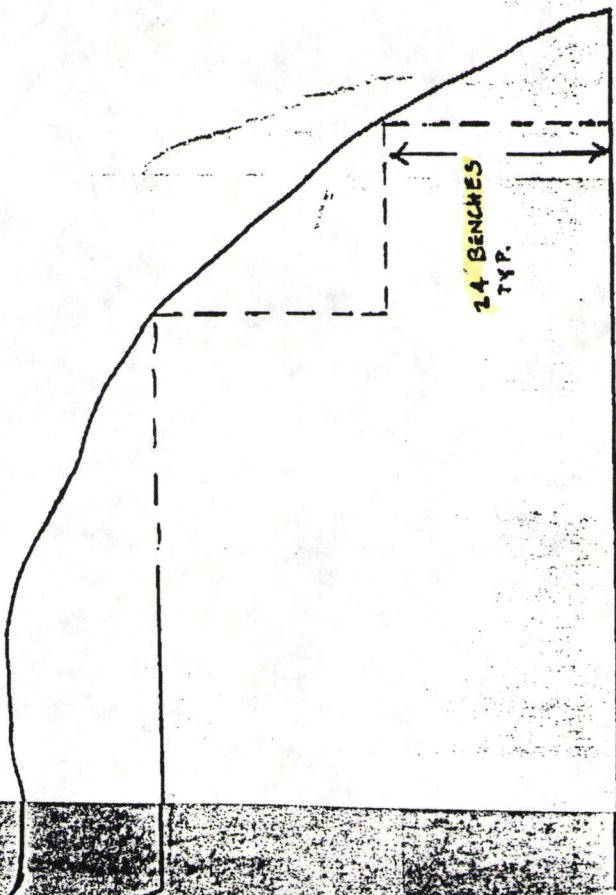
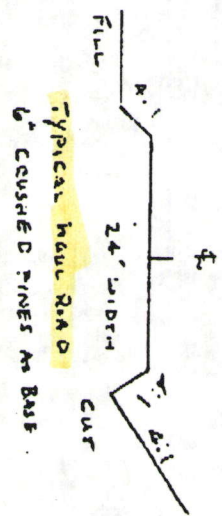
38.4

483

-40'

23

482



24' BENCHES
24' TYP.

50634T

32

480

50634T

Rancho Equipment Service

P.O. Box 576
Delta, Utah 84624

"B"

Small Mining Operation ??

Our plans are to keep the exploration site in a safe, clean, and environmentally stable condition, to conduct exploration activities so as to minimize erosion and control sediment, to stockpile topsoil and suitable over burden before making excavations.

We plan to mine the topographic flat, then redistribute the topsoil and suitable over burden, and properly prepared seedbed to a depth of approximately 6", then reseed the disturbed area with adaptable species as recommended by the B.L.M.

We do not anticipate a non-operation period.

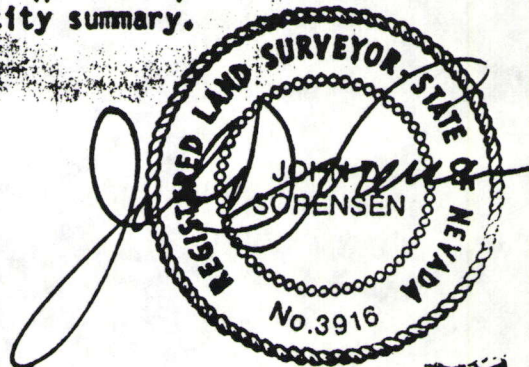
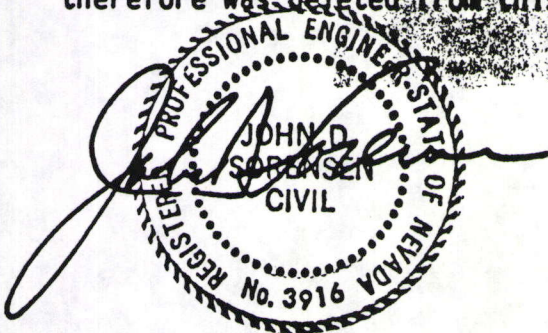
LIME ORE QUANTITY SUMMARY

<u>Property</u>	<u>Acres</u>	1) <u>Ore Quantities</u> (million tons)
N1/2 SE1/4 S28	(80)	28.0
S1/2 SE1/4 S28	(80)	2) -0-
Claim #1	40	2.4
2	40	1.8
13	40	0.5
7	80	1.2
6	40	1.7
3	80	6.5
4	40	1.1
5	40	3.5
8	80	2.0
9	40	8.3
12	40	6.8
10	40	2) -0-
11	40	2) -0-
800 acres		63.8 million tons

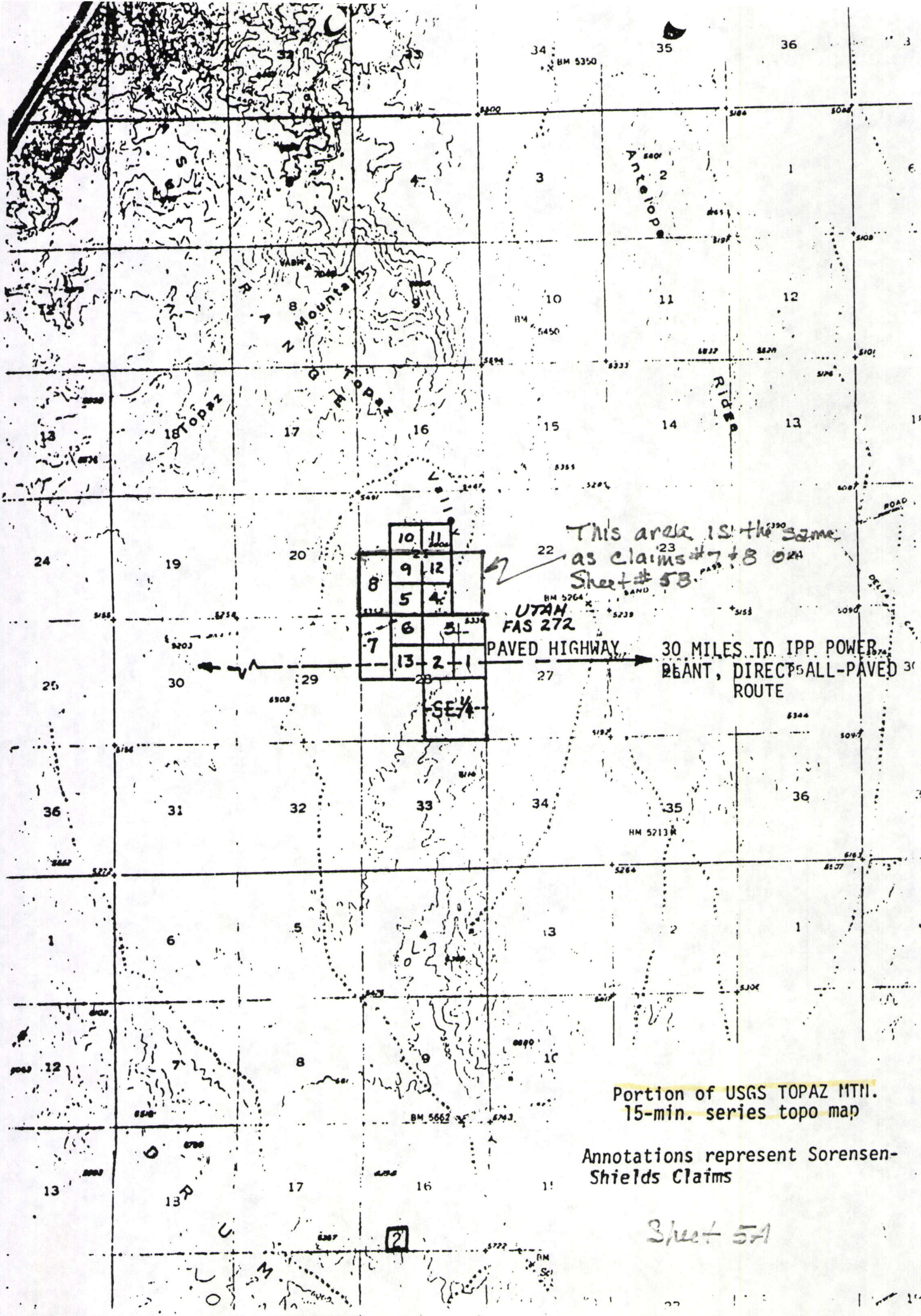
Total 21.7 million tons

1) All quantities represent "above-lay-of-land" only. No quantities were calculated for ore below the grade represented by the highway (approximately 5300' MSL) even though they appear substantial. Tons are 2000 pound units.

2) The ore grade on these claims (portions) has not been confirmed and therefore was deleted from this quantity summary.



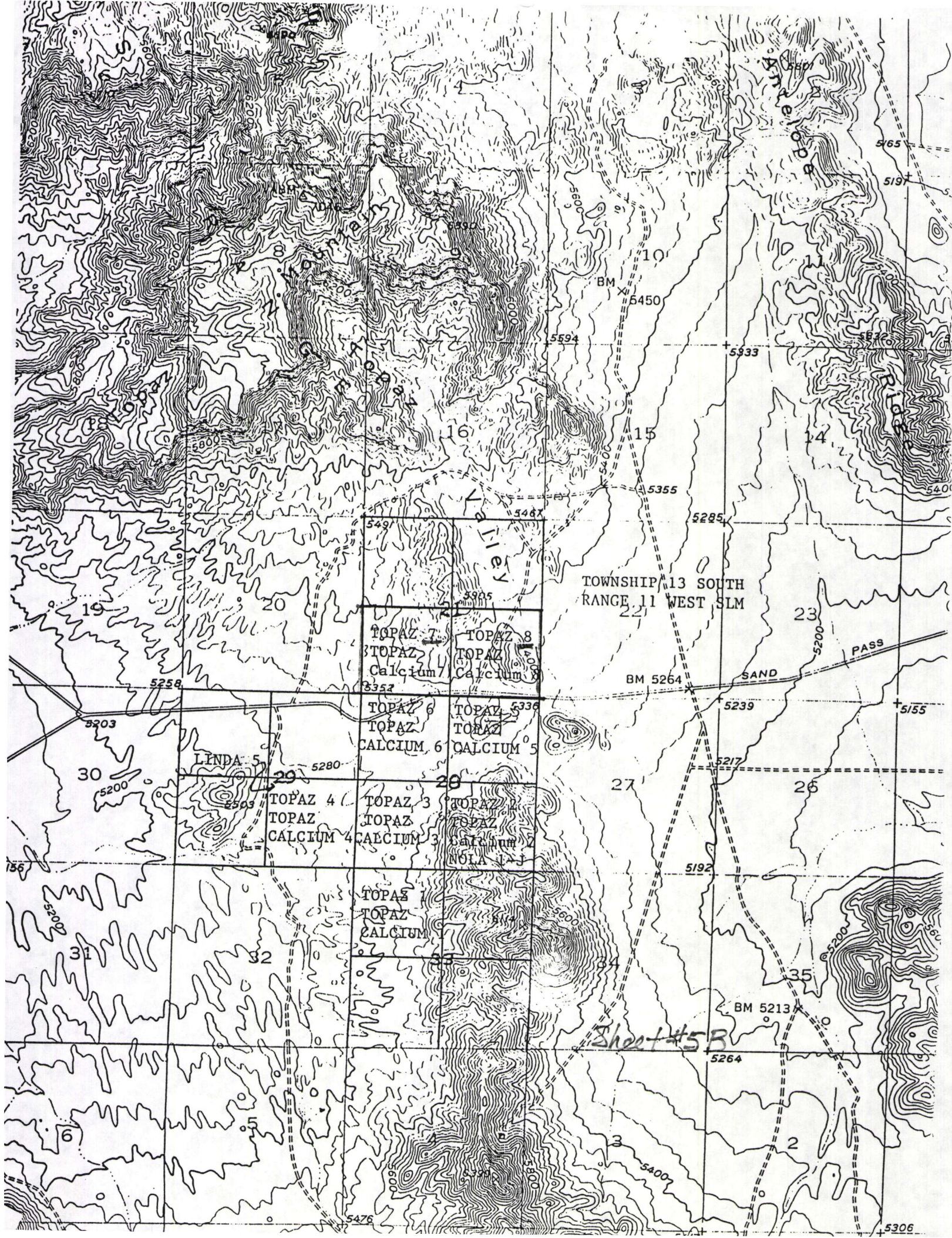
Sheet #50



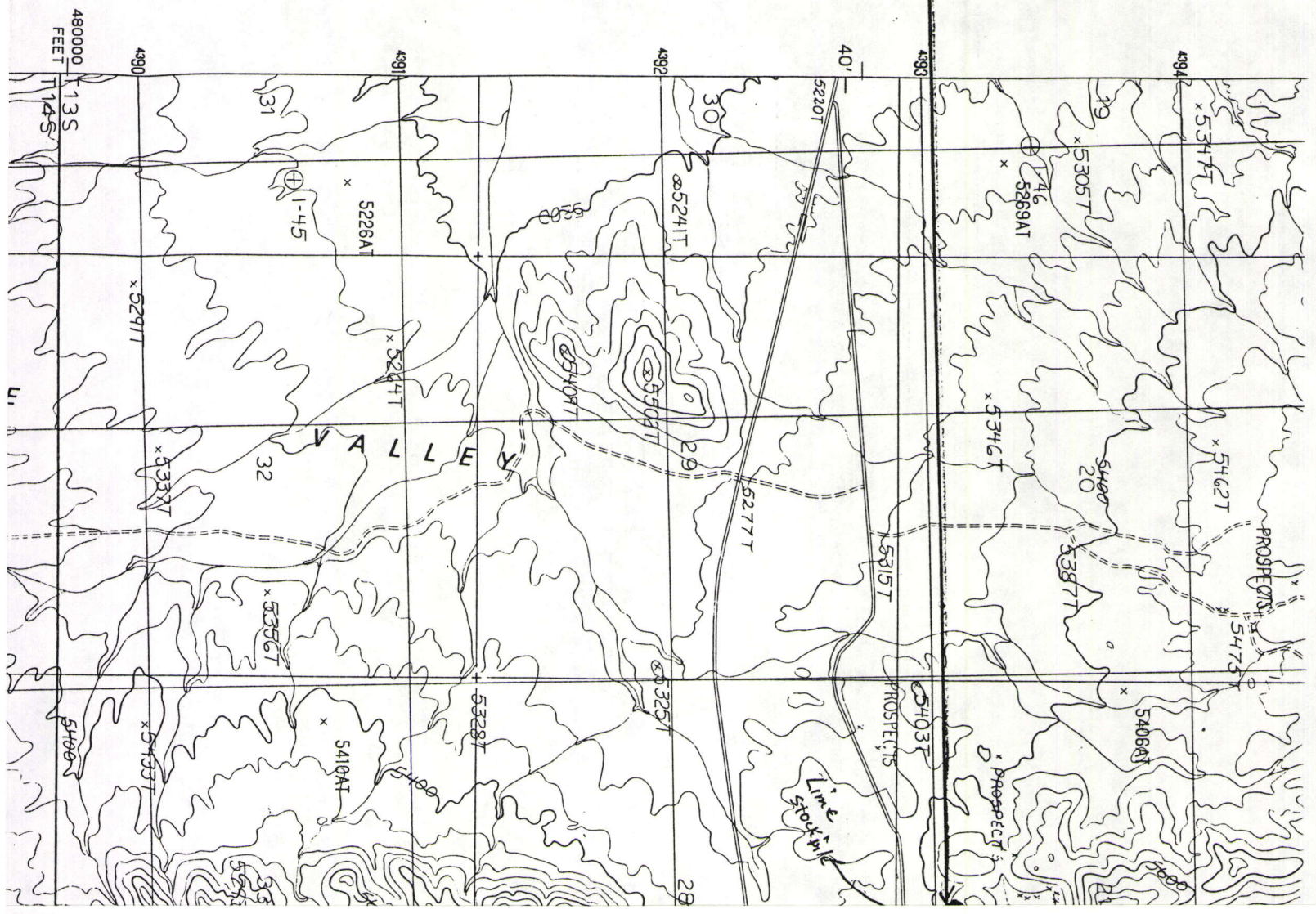
Portion of USGS TOPAZ MTN.
15-min. series topo map

Annotations represent Sorensen-Shields Claims

Sheet 51



~~Steep~~ ~~steep~~
will be located
on the North East and
South west boundaries of
mining operation.



TO: Rancho Equipment Service
279 E. Main, Delta, Utah 84624

FAX 864-4995

31933

Sample No.	Your Sample No.	(%) CaCO ₃	(%) Mg CO ₃	(%) Inerts	(%) Free Moiss
a	Hole 8 45-50'	61.07	37.03	1.90	0.04
f	Hole 9 5-10'	87.10	7.57	5.33	0.06
g	15-20'	91.92	1.98	6.10	0.05
h	25-30'	92.32	0.97	6.71	0.06
i	Hole 10 5-10'	91.46	0.96	7.58	0.05
j	25-30'	93.09	0.76	6.15	0.06
k	45-50'	90.84	3.90	5.26	0.14
l	65-70'	80.72	1.85	7.43	0.08
m	85-90'	89.24	0.73	10.03	0.08
n	105-110'	91.23	0.85	7.92	0.03
o	Hole 11 5-10'	82.69	1.69	15.62	0.14
p	25-30'	83.61	2.46	13.93	0.10
q	45-50'	92.77	0.98	6.25	0.03
r	55-60'	93.94	0.92	5.14	0.04
s	75-80'	88.98	0.98	10.04	0.06
t	95-100'	92.32	0.87	6.81	0.05
u	Hole 12 5-10'	81.06	1.72	17.22	0.10
v	25-30'	81.47	1.64	16.89	0.22
w	45-50'	90.48	0.87	8.65	0.05
x	55-60'	91.63	0.90	7.47	0.05

Hole 11 35-40

65-70

Hole 10 10

15-20

75-80

Hole 7 25-30

These test hole are on
Claims #7 & #8

Sheet 50

5/9/91

L. Lynn Kumbell

Don't

(March 1984)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIPT AND ACCOUNTING ADVICE

NO. 1756063

Subject:

Applicant: J.L. CHIEF

BOX 35

MT. TO, MT

Remitter

Assignor:

SERIAL NO.

UMC 343274

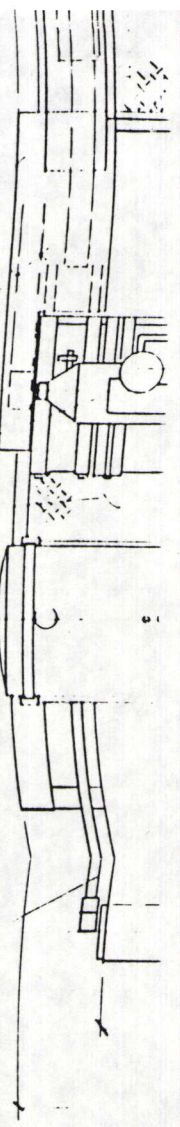
UMC 343281

#7 343280

#8 - 343281

REFER TO THE ABOVE CASE SERIAL NUMBER IN ALL CORRESPONDENCE. PLEASE INFORM THIS OFFICE OF ANY CHANGE IN ADDRESS.

NOTE: This notice is a receipt for monies paid the United States. If these monies are for required fees in connection with your application to lease, purchase, enter, or otherwise acquire an interest in public lands or resources, this receipt is not an authorization to utilize the land applied for and it does not convey any right, title, or interest in the land for which application is made.



-21

-20

-19

-18

-17

(13) 11.5

REMOVABLE
HANDRAILS

(23)

(19)

(21)

-17

(8)

(16)

(13) 11.5

13' 6"

6' 9"

4' 3"

(25)

14' 2 1/2"



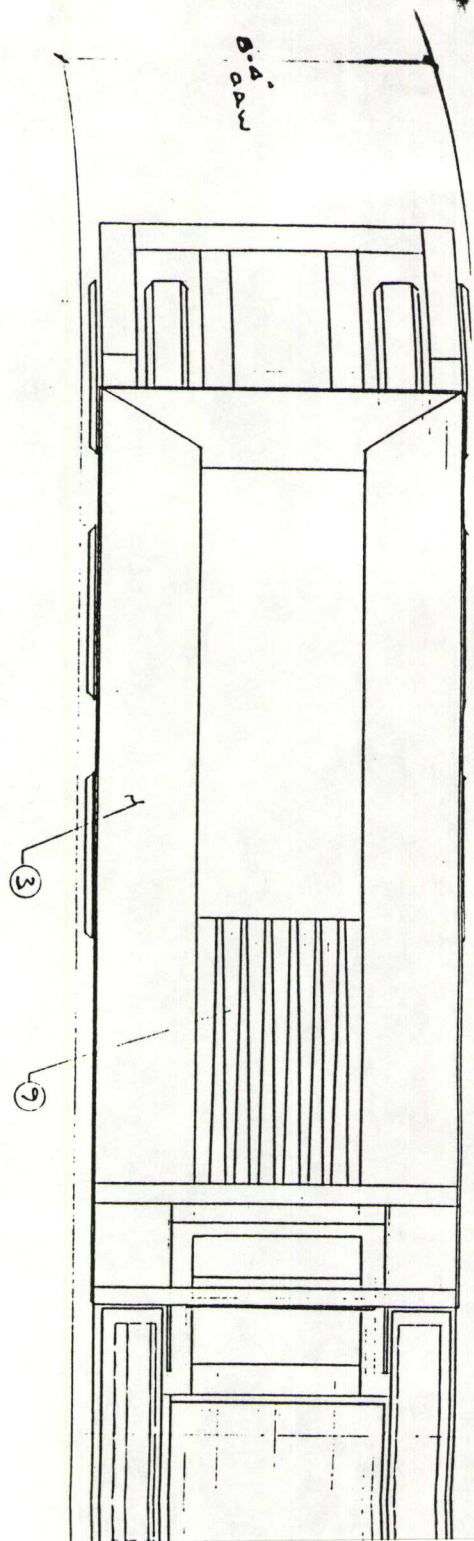
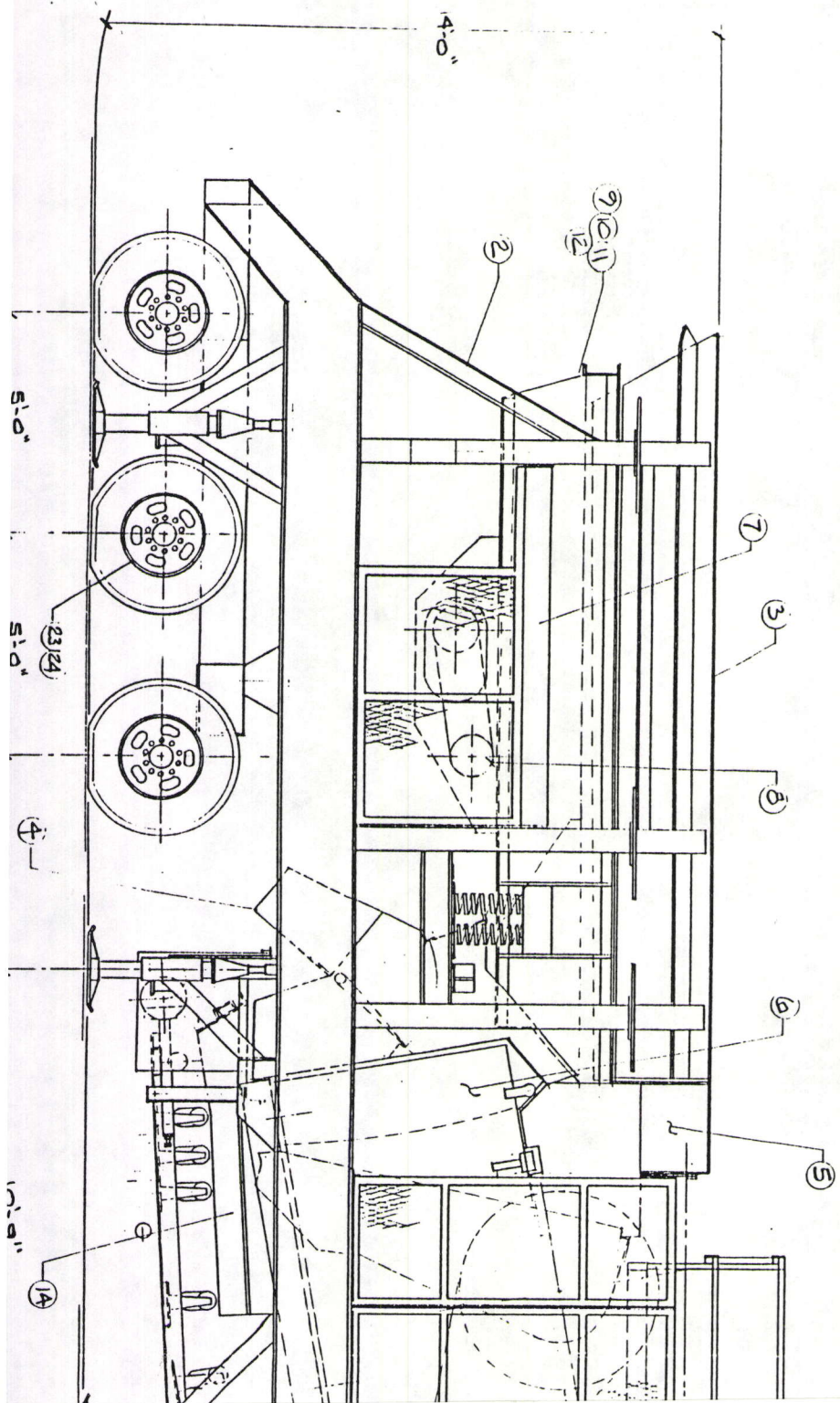
Thunderbird
Industries

System Operator

FINAL ASSEMBLY
4230 JVDHCT

DATE 2-15-91 12:10
D-15276

Sheet #1A



Spec. 45053PART F - DIVISION F2DETAILED REQUIREMENTS

Quality: The Limestone shall be free from mine debris, tramp material, and all other foreign materials. All Limestone received shall be crushed and double-screened to a size such that 100 percent will pass through a 3/4 inch round mesh screen and not more than 10 percent will pass through a 1/4 inch round mesh screen.

When totally dry:

Not more than two (2) percent shall pass through a US Standard 20 mesh screen.

Not more than one (1) percent shall pass through a US Standard 200 mesh screen.

The Limestone shall comply with the following quality requirements:

<u>Characteristics as Received</u>	<u>Quality Requirements</u>	<u>ASTM Test Method</u>
Calcium carbonate content, percent of dry weight, min	90	C 25
Magnesium carbonate content, percent of dry weight, max	7	C 25
Inerts content, percent of dry weight, max	9	C 25
Free moisture, percent by weight, max	5	C 25
Bondwork Index, max	10 or 11 or 12 or 13*	**

*To be determined


The term "as received" shall be the quality of the Limestone at the point of sampling.

Inerts shall be all other constituents in a Limestone sample other than calcium carbonate and magnesium carbonate.

Free moisture shall be the weight of water in a given Limestone sample divided by the weight of the Limestone.

**Bondwork Index as determined by the Colorado School of Mines.

Sheet # 2A


	SYSTEM DESCRIPTION	NO. 9255.93.1001
	SCRUBBER ADDITIVE RECEIVING (BMA)	IPP 020684-0

SYSTEM DESCRIPTION
 FOR
 SCRUBBER ADDITIVE RECEIVING
 INTERMOUNTAIN POWER PROJECT
 INTERMOUNTAIN GENERATING STATION
 1.0 SYSTEM FUNCTION

The function of the Scrubber Additive Receiving System is to receive and unload the limestone trucks and transfer the limestone to the Scrubber Additive Storage and Reclaim System. Site space is reserved to facilitate the future accommodation of limestone delivery by rail.

B-3370

Sheet 3A


	SYSTEM DESCRIPTION	LE 9255.93.1003 O.
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 060684-0

SYSTEM DESCRIPTION
FOR
SCRUBBER ADDITIVE PREPARATION
INTERMOUNTAIN POWER PROJECT
INTERMOUNTAIN GENERATING STATION
1.0 SYSTEM FUNCTION

The function of the Scrubber Additive Preparation System is to grind the limestone scrubber additive in water to form a transportable slurry with the required solids density and particle size distribution, to provide for accumulation and storage of the slurry, and to supply limestone slurry to each scrubber module in the Desulfurization Systems (CCC) of the two generating units.

B-3507

Sheet 3B

	TEM DESCRIPTION SCRUBBER ADDITIVE STORAGE AND RECLAIM (BMB)	LE 9255.93.1002 IPP 020684-0
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SYSTEM DESCRIPTION
 FOR
 SCRUBBER ADDITIVE STORAGE AND RECLAIM
 INTERMOUNTAIN POWER PROJECT
 INTERMOUNTAIN GENERATING STATION

1.0 SYSTEM FUNCTION

The function of the Scrubber Additive Storage and Reclaim System is to stock out the limestone received from the Scrubber Additive Receiving System into active or reserve storage. It provides surge capacity and reclaims the limestone from either storage area as required.

B-33/5

Sheet 3C

	SYSTEM DESCRIPTION	NO. 9255.93.1001
	SCRUBBER ADDITIVE RECEIVING (BMA)	IPP 101685-2

2.0 DESCRIPTION OF SYSTEM


The Scrubber Additive Receiving System consists of a truck unloading hopper, a hopper gate, a belt feeder, chutework and the truck unloading dust collection equipment. The general arrangement of the major limestone handling equipment associated with this system is shown on Figures 2-1 through 2-3. Interfacing systems are listed in Table 2-1.

Limestone coming to the Intermountain Generating Station by truck is dumped into Limestone Truck Unloading Hopper 1. Limestone is removed by gravity from the bottom of the hopper through Limestone Truck Hopper Gate 1 to Limestone Truck Hopper Feeder 1. The variable-rate belt feeder is used to transfer limestone to Limestone Conveyor 1 at a uniform rate. The hopper and feeder discharge chutes are equipped with heater panels to prevent the limestone from freezing to the steel in cold weather. Limestone can also be dumped directly on the ground at the storage area, if required.

The limestone truck unloading hopper structure is equipped with a water collection pit and sump pump to prevent flooding of the equipment in this area.

Site space on the rail siding located south of the railroad track through the Coal Car Thaw Shed is reserved for the addition of a limestone car unloading hopper and the associated equipment to allow for the future delivery of limestone by railcars.

Dust collection equipment is provided to filter dust laden air at the takeoff points. General arrangements of the major dust collection equipment associated with this system are shown on Figures 2-4 and 2-5. Interfacing systems are listed in Table 2-1. Dust generated at the transfer point is collected as shown on Figure 2-6. The Dust Collection System is similar to a vacuum cleanup system with automatic bag cleaning. The exhaust fan induces air to flow from dust collection pickup points at the transfer area beneath Limestone Truck Unloading Hopper 1 to the fan exhaust outlet via connecting ducts and the dust collector. Suspended dust in the vicinity of the collection points is entrained in this airstream. Within the


	ITEM DESCRIPTION	FILE 9255.93.1002
	SCRUBBER ADDITIVE STORAGE AND RECLAIM (BMB)	IPP 121185-2

At the Limestone Crusher Building, tramp iron is removed from the limestone by Limestone Magnetic Separator 2. The limestone is then directed to either Limestone Crusher 1, where any limestone lumps are broken up, or bypassed directly to Limestone Conveyor 3, by Limestone Crusher Bypass Gate 2. The limestone is discharged from the crusher onto Limestone Conveyor 3 which conveys it to the Limestone Preparation Building. There it is transferred to Limestone Conveyor 4 for distribution to the three Limestone Day Bins.

Limestone Conveyor 4 is a fixed tripper conveyor with a set of diverter gates over each limestone day bin. The gates divert the limestone to the day bin or back onto the conveyor. Limestone is discharged from the day bins through gyratory bin bottoms.


Emergency limestone reclaim is available to reclaim limestone when the primary reclaim facility is unavailable. Emergency limestone reclaim consists of a bucket elevator, a vibratory feeder, and a hopper, all located at the Limestone Preparation Building on the west side. Limestone from the ground level truck dump station is loaded into the hopper by mobile equipment consisting of a front end loader and a portable conveyor. The limestone is then transported to Limestone Day Bin 2A or to Limestone Conveyor 4 which distributes the limestone to Day Bins 2B and 2C.

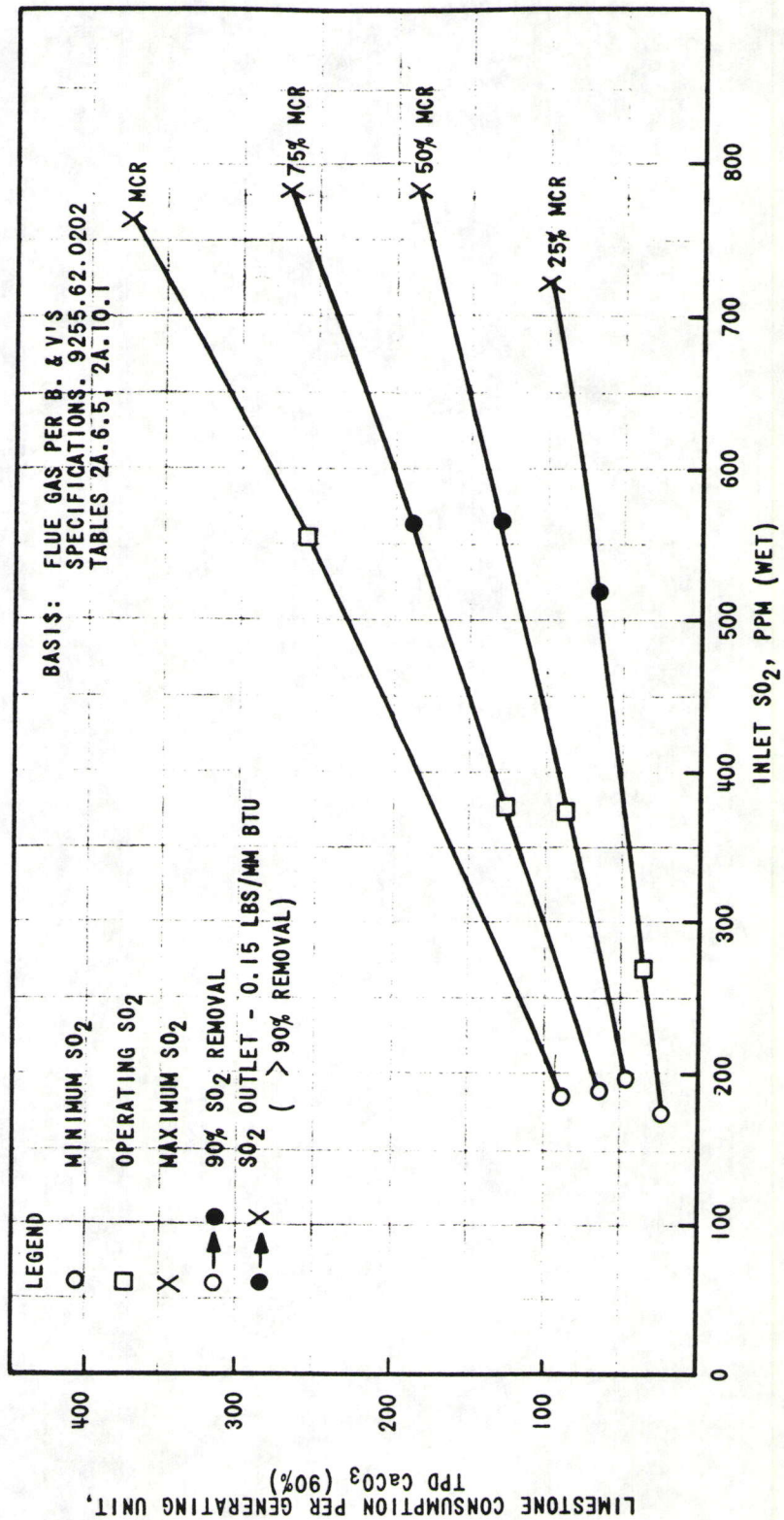
Dust collection equipment is provided to filter dust laden air at various takeoff points. The general arrangement of the major dust handling equipment associated with the dust collection equipment is shown on Figures 2-6 through 2-8. Dust generated at transfer points is collected as shown on Figure 2-9. Each dust collection system is similar to a vacuum cleanup system with automatic bag cleaning. The exhaust fan induces air to flow from dust collection pickup points to the fan exhaust outlet via connecting ducts and the dust collectors. Suspended dust in the vicinity of the collection points is entrained in this airstream. Within the dust collectors, particulate is deposited on the outer surface of fabric bag filters. To remove dust from the filter surfaces, compressed air is released at periodic intervals into the inside of the bag filters. The dust drops to the bottom of the collector hopper and is either discharged

	EM DESCRIPTION	9255.93.1002
	SCRUBBER ADDITIVE STORAGE AND RECLAIM (BMB)	IPP 121185-2


directly by a rotary vane valve or is collected by a dust collector screw conveyor before entering the rotary vane valve. From the rotary vane valve, the collected dust passes either through a chute or a dust return screw conveyor to the appropriate limestone conveyor or day bin.

The Scrubber Additive Storage and Reclaim System can be controlled from the Limestone Handling Control Panel (CP) located in the Limestone Preparation Building. The Limestone Handling Control Panel (CP) and graphic display is always functional and gives the operator a complete status of the Scrubber Additive Storage and Reclaim System.

	SYSTEM DESCRIPTION	FILE NO. 9255.93.1003
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 032585-1



LIMESTONE CONSUMPTION VS. INLET SO₂
FIGURE 2-4


	SYSTEM DESCRIPTION	FILL NO. 9255.93.1003
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 032585-1

thickener overflow in the Scrubber Solids System (ASE), is used to grind the limestone in the ball mill pulverizers. Slurry is discharged from each pulverizer to a collection tank by gravity flow. Each collection tank is equipped with a turbine type agitator to keep the limestone slurry solids in suspension. Recovered water is added to the limestone slurry in the collection tank to dilute the limestone slurry as required so that the slurry leaving the cyclone classifier overflow to the distribution trough is approximately 40 per cent solids. In addition to recovered water, slurry from the pretreatment sludge storage tank may be added to the collection tank and will serve to dilute the limestone slurry. The pretreatment sludge is waste from the Circulating Water Makeup Treatment System and is utilized in the Scrubber Additive Preparation System to dispose of the pretreatment sludge and to reduce the consumption of raw limestone.

Limestone slurry is continuously pumped from the collection tank to a cyclone classifier, and back to the tank through a piping loop whenever a slurry production process stream is in operation. In the event of low level in the collection tank, slurry flow to the classifier is shut off and the slurry in the piping loop is recycled to the collection tank to protect the classifier feed pumps and to maintain slurry circulation in the ring header.

Oversized limestone particles are removed by the classifier and returned to the pulverizers for regrinding. The classified slurry discharged from the classifier in each of the slurry production process streams flows by gravity into one common distribution trough. Slurry is discharged from the trough to either of the limestone slurry storage tanks. Each distribution trough discharge is equipped with a shutoff valve to allow isolation of a given storage tank.

Limestone slurry accumulated in the storage tanks is kept in suspension by a turbine type agitator. The limestone slurry is continuously pumped in a ring header loop from each storage tank past the scrubber modules in the Desulfurization System (CCC) for one generating unit, and back to the distribution trough. A portion of the limestone slurry is


	ITEM DESCRIPTION	9255.93.1003
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 032585-1

discharged from the loop into the scrubber module reaction tanks as governed by the Desulfurization System controls.

As indicated above, the Scrubber Additive Preparation System also processes water pretreatment lime softening sludge from the Circulating Water Makeup Treatment System (WTA) for use as a supplemental scrubber additive. The pretreatment sludge is continuously produced by the Circulating Water Makeup Treatment System, and is accumulated in a pretreatment sludge storage tank in the Scrubber Additive Preparation System. The pretreatment sludge storage tank is equipped with a turbine type agitator to keep the solids in suspension. If this sludge is approximately the same weight per cent solids as the limestone slurry discharged from the limestone slurry classifiers, the pretreatment sludge is periodically pumped directly to the limestone slurry storage tanks via the slurry distribution trough. If the density of the pretreatment sludge is less than the desired weight per cent solids, it is pumped to one or more of the limestone pulverizer collection tanks which are in active slurry production process streams. This will serve to dilute the limestone pulverizer product slurry in the pulverizer collection tank to the desired density. The pretreatment sludge is pumped in a ring header from its storage tank to the limestone pulverizers and distribution trough, and back to its storage tank to prevent the pretreatment sludge from settling and plugging the pipelines. The pretreatment sludge storage tank will be essentially emptied during the production of each batch of limestone slurry to provide sufficient storage capacity for additional pretreatment sludge production.

Recovered water, which primarily originates as thickener overflow in the Scrubber Solids System (ASE), is used for limestone grinding and slurry dilution. This water is also used for flushing the slurry pumps and process piping when they are removed from service, and for general limestone slurry preparation building floor washdowns.

The water from process piping flushes and area floor washdowns, as well as drains and overflows from the pulverizer collection tanks, limestone slurry storage tank, and the pretreatment sludge storage tank, are

	SYSTEM DESCRIPTION	NO. 9255.93.1003
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 032585-1


directed to a limestone preparation building sump through a floor trench network. The contents of the sump are periodically pumped to the thickener feed mix tank in the Scrubber Solids System for processing.

Water recycled from the Scrubber Solids System thickener overflow via the wastewater holding pond is the primary source of all makeup and flush water in the Scrubber Additive Preparation System. This approach is used in order to minimize the addition of water to the station's overall water balance.

Seal water for the Scrubber Additive Preparation System slurry pumps is obtained from the Scrubber Makeup Water System, which primarily originates as cooling tower blowdown. The limestone preparation building seal water supply equipment components consist of two surge tanks, two pumps, and an automatic back wash type filter. Seal water discharge from the pump seal drains to the limestone preparation building sump.

The Scrubber Additive Preparation System is designed with sufficient component redundancy to permit slurry production and distribution to continue at the maximum limestone usage rate in the event of a failure of any single component. There are three limestone slurry production process streams; one for each steam generator unit plus one common spare. Each production process stream has two full-capacity classifier feed pumps which take suction from the slurry collection tank and discharge to the classifier inlet. The second full-capacity classifier feed pump serves as a standby. The classified slurry flows by gravity from each classifier to a common distribution trough. The distribution trough supplies slurry to either one or both of the two limestone slurry storage tanks,

Each storage tank serves as the primary source of slurry for the Desulfurization System in one of the two generating units. In addition, each tank serves as a backup source for the other unit via a crosstie on the discharge side of the slurry feed pumps associated with each slurry storage tank. There are four full-capacity slurry feed pumps; two pumps taking suction from each slurry storage tank. The second pump on each tank serves as a standby. The Desulfurization System (CCC) for each generating unit is supplied through a single limestone slurry feed piping

	SYSTEM DESCRIPTION	E 9255.93.1003
	SCRUBBER ADDITIVE PREPARATION (BMC)	IPP 032585-0

loop. The loop is fed by a pair of redundant slurry feed pumps. Each loop discharges to the common distribution trough. A portion of the slurry is fed to each Desulfurization System module reaction tank, as governed by the associated control circuits, through a control valve. A malfunction of this control valve will necessitate isolation of the associated scrubber module reaction tank. A problem with the slurry feed loop piping will necessitate isolation of all the scrubber modules in the associated Desulfurization System.

There are two full-capacity pretreatment sludge pumps which take suction from the pretreatment sludge storage tank. The second full-capacity pump serves as a standby.